

Title (en)

GATE MATERIAL FOR SEMICONDUCTOR DEVICE FABRICATION

Title (de)

GATE-MATERIAL FÜR DIEHALBLEITERBAUELEMENTEHERSTELLUNG

Title (fr)

MATERIAU DE GRILLE POUR LA FABRICATION DE DISPOSITIFS A SEMI-CONDUCTEUR

Publication

EP 1561238 A1 20050810 (EN)

Application

EP 03809619 A 20031022

Priority

- US 0333561 W 20031022
- US 42022702 P 20021022

Abstract (en)

[origin: WO2004038778A1] In forming an electronic device, a semiconductor layer is pre-doped and a dopant distribution anneal is performed prior to gate definition. Alternatively, the gate is formed from a metal. Subsequently formed shallow sources and drains, therefore, are not affected by the gate annealing step.

IPC 1-7

H01L 21/28; **H01L 21/8238**; **H01L 29/10**; **H01L 27/092**

IPC 8 full level

H01L 21/28 (2006.01); **H01L 21/336** (2006.01); **H01L 21/8238** (2006.01); **H01L 29/10** (2006.01); **H01L 29/49** (2006.01); **H01L 29/786** (2006.01)

CPC (source: EP US)

H01L 21/28079 (2013.01 - EP US); **H01L 21/28097** (2013.01 - EP US); **H01L 21/823807** (2013.01 - EP US); **H01L 21/823814** (2013.01 - EP US); **H01L 21/823828** (2013.01 - EP US); **H01L 21/823842** (2013.01 - EP US); **H01L 29/1054** (2013.01 - EP US); **H01L 29/66583** (2013.01 - EP US); **H01L 29/7842** (2013.01 - EP US); **H01L 29/495** (2013.01 - EP US); **H01L 29/4966** (2013.01 - EP US); **H01L 29/4975** (2013.01 - EP US); **H01L 29/78654** (2013.01 - EP US); **Y10S 438/938** (2013.01 - EP US)

Citation (search report)

See references of WO 2004038778A1

Citation (examination)

- US 6399452 B1 20020604 - KRISHNAN SRINATH [US], et al
- JP 2002270849 A 20020920 - HITACHI LTD
- AUGENDRE E ET AL: "Transistor optimisation for a low cost, high performance 0.13 @mm CMOS technology", SOLID STATE ELECTRON, ELSEVIER SCIENCE PUBLISHERS, BARKING, GB, vol. 46, no. 7, 1 July 2002 (2002-07-01), pages 959 - 963, XP004354439, ISSN: 0038-1101, DOI: 10.1016/S0038-1101(02)00026-6

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2004038778 A1 20040506; AU 2003301603 A1 20040513; EP 1561238 A1 20050810; JP 2006505116 A 20060209; JP 4796771 B2 20111019; US 2004137685 A1 20040715; US 2006024869 A1 20060202; US 2006258075 A1 20061116; US 6991972 B2 20060131; US 7074655 B2 20060711; US 7326599 B2 20080205

DOCDB simple family (application)

US 0333561 W 20031022; AU 2003301603 A 20031022; EP 03809619 A 20031022; JP 2004547063 A 20031022; US 23717505 A 20050928; US 43628106 A 20060518; US 69100703 A 20031022